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## Chapter I

# Principles, Foundations & Issues in Enterprise Systems

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## **Abstract**

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*The objective of this chapter is to provide a detailed review of the core principles, foundations and issues of enterprise systems (ES). Since the late 1990s, enterprise systems have promised to seamlessly integrate information flowing through the organisation. They claim to lay redundant many of the integration problems associated with legacy systems. These promises are timely considering the current trends of globalisation, virtual organisations, and constant business and technological changes, features of many strategy agendas. In an effort to better understand the nature of these packages this chapter reviews the ES evolutionary*

*process, and generic software characteristics are also identified, followed by system benefits and limitations. A review of current approaches to ES implementation allows for a critique of system outcomes and identification of challenges facing today's ES implementations. The chapter concludes with suggestions for overcoming some of these challenges.*

## **Introduction**

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Organisations have introduced enterprise systems in order to reduce problems associated with legacy systems, cope with year 2000 challenges, offer the firm greater competitive advantages, compete globally, and to assist the company achieve a single “integrated” technological platform. With organisations stressing the need for greater supply chain integration, these systems offer the first glimmer of hope to achieve such integration. Continued technological advances “extend” current ES packages along the supply chain, with future systems focusing on the penultimate goal, that is, inter-enterprise integration.

However, all is not as it appears. Reviewing the ES literature reveals problems with the implementation of such systems. Apart from the technological challenges associated with their introduction, a deeper cord has been struck; that is, the challenge of attaining greater organisational integration. Studies have revealed up to 60% dissatisfaction from ES implementations, with the primary reason for such poor performance emerging from the failure to properly consider organisational and human issues. Undoubtedly, for better returns on ES investments, organisations need to pay as much attention to organisational and human issues as to technical issues.

This chapter starts with an historical overview of the information technology field. The evolution to ES packages is then presented, reviewing their emergence, nature and future trends. Benefits and limitations of such systems are then considered before a review of current approaches to ES implementation. ES outcomes are reviewed, followed by a critique of some challenges facing the field. The chapter concludes with suggestions for overcoming some of these challenges.

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